



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,541	07/16/2001	Reuel W. Nash	1930.0090001	2299

26111 7590 05/07/2003

STERNE, KESSLER, GOLDSTEIN & FOX PLLC  
1100 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

SINGH, DALIP K

ART UNIT	PAPER NUMBER
----------	--------------

2676

DATE MAILED: 05/07/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

**Office Action Summary**

Application No.

09/904,541

Applicant(s)

NASH ET AL.

Examiner

Dalip K Singh

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 12 recites the limitation "--said phase code sequence--" in line 2. There is insufficient antecedent basis for this limitation in the claim.

3. Claim 13 recites the limitation "-- said phase code sequence--" in line 2. There is insufficient antecedent basis for this limitation in the claim.

4. Claim 19 recites the limitation "--said phase code sequence --" in line 2. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 20 recites the limitation "--said phase code sequence --" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Objections***

6. Claims 12, 13, 19 and 20 are objected to because of the following informalities: In line 2 of all these claims, "--said phase code sequence--" should be "--said phase module sequence--". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2676

8. Claim 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Patent No. 6,198,488 B1 to Lindholm et al.

a. Regarding claims 1, 11 and 18, Lindholm et al. **discloses** managing microcode (...micro-code organization of transform module 52...Figure 5) comprising the steps of evaluating a mode command (...a buffer 1202 adapted for receiving the mode bits from VAB 50 that are indicative of the status of a plurality of modes of process operations...col. 16, lines 34-40) to implement or change a mode, said mode having one or more phases (...mode bits...are indicative of the status of a plurality of modes of process operations...col. 16, lines 34-40) ; and identifying a phase module sequence in response to said evaluated mode command, wherein said phase module sequence includes at least one phase module containing microcode to implement a corresponding phase (...a sequencing module 1206 is coupled between memory 412 and a control vector module 1205...for identifying a plurality of addresses...based on a control vector derived from mode bits 202...col. 16, lines 41-51).

b. Regarding claim 2, Lindholm et al. **discloses** querying a storage medium to select a phase module to match said mode (...the sequencing module 1206 is further adapted for accessing the addresses in memory 412 for retrieving the code segments that might be used to operate transform module 52...col. 16, lines 48-51).

c. Regarding claims 3-5, 12, 13, 17, 19, 20 and 23, Lindholm et al. **discloses** identifying a plurality of addresses in memory 412 based on a control vector derived from mode bits 202 which is similar to recited claim limitation "loading

Art Unit: 2676

said phase module sequence into a microcode instruction/data memory and execution to implement said mode" (col. 16, lines 41-51).

d. Regarding claims 6, 14 and 21, Lindholm et al. **discloses** sending a result form said executing said phase module sequence (mode bits operations results) to a processor for pixel processing or additional microcode processing (Figure 4, col. 10; lines 15-48).

e. Regarding claim 7, Lindholm et al. **discloses** microcode processing being done prior to said executing said phase module sequence (Figure 4, col. 10, lines 28-39).

f. Regarding claims 8-10, 15, 16 and 22, Lindholm et al. **discloses** three dimensional graphics, animation scene and video game rendering happening prior to executing said phase module sequence (...a graphics pipeline system is provided for graphics processing...col. 3, lines 2-5;...In use lighting module 54 controls the buffer bypass pathway 1501...employs the same mode bits 202 as transform module 52...Figure 15, col. 20, lines 48-67).

### **Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Dalip K. Singh** whose telephone number is **(703) 305-3895**. The examiner can normally be reached on Mon-Thu (8:00AM-6: 30PM) Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella**, can be reached at **(703) 308-6829**.

**Any response to this action should be mailed to:**

Art Unit: 2676

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

dks

May 5, 2003



MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600